Record Nr. UNINA9910781962203321 Autore Goldblatt Robert Titolo Quantifiers, propositions and identity: admissible semantics for quantified modal and substructural logics / / Robert Goldblatt [[electronic resource]] Cambridge:,: Cambridge University Press,, 2011 Pubbl/distr/stampa **ISBN** 1-139-09842-X 1-139-09910-8 1-139-10178-1 1-139-09978-7 0-511-86235-0 Descrizione fisica 1 online resource (xiii, 268 pages) : digital, PDF file(s) Collana Lecture notes in logic;; 38 Classificazione MAT018000 511.3 Disciplina Soggetti Modality (Logic) Variables (Mathematics) Semantics (Philosophy) Logic, Symbolic and mathematical Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from publisher's bibliographic system (viewed on 05 Oct 2015). Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction and overview -- Chapter 1. Logics with actualist quantifiers -- Chapter 2. The Barcan formulas -- Chapter 3. The existence predicate -- Chapter 4. Propositional functions and predicate substitution -- Chapter 5. Identity -- Chapter 6. Cover semantics for relevant logic. Many systems of quantified modal logic cannot be characterised by Sommario/riassunto Kripke's well-known possible worlds semantic analysis. This book shows how they can be characterised by a more general 'admissible semantics', using models in which there is a restriction on which sets of worlds count as propositions. This requires a new interpretation of quantifiers that takes into account the admissibility of propositions. The author sheds new light on the celebrated Barcan Formula, whose role becomes that of legitimising the Kripkean interpretation of

quantification. The theory is worked out for systems with quantifiers ranging over actual objects, and over all possibilia, and for logics with

existence and identity predicates and definite descriptions. The final chapter develops a new admissible 'cover semantics' for propositional and quantified relevant logic, adapting ideas from the Kripke-Joyal semantics for intuitionistic logic in topos theory. This book is for mathematical or philosophical logicians, computer scientists and linguists.